

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on:

May 31, 2001, 06:37:45 ; Search time 1114.81 Seconds
(without alignments)

6191.188 Million cell updates/sec

Title: US-09-612-921-3
Perfect score: 468
Sequence: 1 atggctctgatggcgct.....acttccaaagcaatgtgactag 468

Scoring table: IDENTITY NUC
Gapop 10.0 , gapext 1.0

Searched: 1283235 seqs, 7373929652 residues

Total number of hits satisfying chosen parameters:

2566470

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	468	100.0	468 88 AF230377	AF230377 Homo sapi
2	468	100.0	1282 10 AX059307	AX059307 Sequence
3	468	100.0	1288 88 AF201830	AF201830 Homo sapi
4	468	100.0	2604 92 HSA242738	AJ242738 Homo sapi
5	468	100.0	2613 92 HSA242737	AJ242737 Homo sapi
6	468	100.0	2648 10 AX059309	AX059309 Sequence
7	468	100.0	2720 88 AF186094	AF186094 Homo sapi
8	351.2	75.0	468 10 AX059335	AX059335 Sequence
9	351.2	75.0	471 94 AF230378	AF230378 Mus muscu
10	351.2	75.0	1283 94 AF200495	AF200495 Mus muscu
11	351.2	75.0	1284 94 MMU250429	MMU250429 Mus muscu

12 243 51.9 357 10 AX069304 Sequence
 13 243 51.9 985 10 AX069305 Sequence
 14 227 48.5 5751 10 AX069310 Sequence
 15 227 48.5 6540 92 HSA271338 Homo sapi
 16 227 48.5 7604 88 AF216693 Homo sapi
 17 227 48.5 7605 10 AX069311 Sequence
 18 227 48.5 198092 65 AC016724 Homo sapi
 19 174.2 37.2 8032 10 AX069334 Sequence
 20 110.8 23.7 998 9 AX048803 Sequence
 21 110.8 23.7 998 9 AX048805 Sequence
 22 110.2 23.5 462 9 AR105636 Sequence
 23 110.2 23.5 474 9 AR01464 Sequence
 24 110.2 23.5 474 9 AR055509 Sequence
 25 110.2 23.5 474 9 AR055509 Sequence
 26 110.2 23.5 514 10 I42450 Sequence
 27 110.2 23.5 531 9 A49726 Sequence
 28 110.2 23.5 531 9 A50144 Sequence
 29 110.2 23.5 534 9 HUMIRA Sequence
 30 110.2 23.5 534 9 M63099 Human Inter
 31 110.2 23.5 540 10 I09591 Sequence
 32 110.2 23.5 540 10 I0592 Sequence
 33 110.2 23.5 543 9 AR004317 Sequence
 34 110.2 23.5 578 92 HSILIRAI Sequence
 35 110.2 23.5 579 9 A50279 Sequence
 36 110.2 23.5 579 9 AR001465 Sequence
 37 110.2 23.5 579 9 AR055510 Sequence
 38 110.2 23.5 600 10 I08135 Sequence
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 40 110.2 23.5 602 9 AR005097 Sequence
 41 110.2 23.5 602 9 AR036273 Sequence
 42 110.2 23.5 602 9 AR049621 Sequence
 43 110.2 23.5 602 9 AR059551 Sequence
 44 110.2 23.5 602 9 HUMILRAA Sequence
 45 110.2 23.5 602 9 M55646 Human icIL-

ALIGNMENTS

RESULT 1
 REF230377 AF230377 468 bp mRNA PRI 02-AUG-2000
 LOCUS Homo sapiens interleukin-1 delta mRNA, complete cds.
 DEFINITION Homo sapiens interleukin-1 delta mRNA, complete cds.
 VERSION AF230377.1 GI:9651788
 KEYWORDS human.
 SOURCE
 ORGANISM Homo sapiens
 REFERENCES
 AUTHORS Debets,R., Timans,J.C., Zurawski,S., Sana,T.R., Bazan,F. and Kastelein,R.A.
 TITLE Novel IL-1 ligands IL-1 α and IL-1 β use IL-1R related protein 2 (unpublished)
 JOURNAL 2 (bases 1 to 468)
 REFERENCE 2 (bases 1 to 468)
 AUTHORS Kastelein,R.A., Timans,J.C., Sana,T., Debets,R. and Bazan,F.
 TITLE Direct Submission
 JOURNAL Submitted (01-FEB-2000) Molecular Biology, DNA Research Institute, 901 California Ave, Palo Alto, CA 94304, USA
 FEATURES source
 source Location/Qualifiers
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 /chromosome="2"
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RESULT 2
 AX069307 Locus AX069307 1282 bp DNA PAT 25-JAN-2001
 DEFINITION Sequence 4 from Patent WO0102571.
 VERSION AX069307
 KEYWORD SOURCE
 ORGANISM Homo sapiens
 REFERENCES
 AUTHORS Fukuyama, Metazoa; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 TITLE A interleukin-1 receptor antagonist and uses thereof
 JOURNAL HYSEQ, INC. (US)
 FEATURES source
 source Location/Qualifiers
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 /ob_xref="taxon:9606"
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 /ab_xref="GI: 1257910"
 /translation="MVLSGALCFRMKDSALKVLYLHNQNLAGGLHAGKVVKGEETSV
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CDS
 BASE COUNT 294 a 337 c 350 g 301 t
 ORIGIN

RESULT	6	REFERENCE	1 (bases 1 to 2720)
AX069309	AX069309	AUTHORS	Mulero,J.J., Pace,A.M., Neiken,S.T., Loeb,D.B., Correa,T.R., Drmanac,R. and Ford,J.E.
LOCUS	2648 bp DNA	TITLE	IL1HY1: A Novel Interleukin-1 Receptor Antagonist Gene
DEFINITION	Sequence 6 from Patent WO0102571.	JOURNAL	Biochem. Biophys. Res. Commun. 263 (3), 702-706 (1999)
ACCESSION	AX069309	PUBMED	10512743
VERSION	AX069309.1	REFERENCE	2 (bases 1 to 2720)
KEYWORDS	human.	AUTHORS	Mulero,J.J., Pace,A.M., Neiken,S.T., Loeb,D.B., Correa,T.R., Drmanac,R. and Ford,J.E.
ORGANISM	Homo sapiens	TITLE	Direct Submission
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	JOURNAL	Submitted (13-SEP-1999) Functional Genomics, HYSEQ Inc., 670 Almanor Ave., Sunnyvale, CA 94086, USA	
REFERENCE	1 (bases 1 to 2648)	PATENT	25-JAN-2001
AUTHORS	Ford,J. and Pace,A.	FEATURES	Location/Qualifiers
TITLE	A interleukin-1 receptor antagonist and uses thereof	SOURCE	1. .2720
JOURNAL	Patent: WO 0102571-A 6 11-JAN-2001;	gene	1. .2720
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FEATURES	1. .2648	gene	/gene="IL1HY1"
SOURCE	/organism="Homo sapiens"	CDS	163..630
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Db	62 ATGGCTCTGAGTGGGGCGCTTGCTCGAATGAAGGACTCGGCCATTGAAGGT 121	VPNRMLDASISPVILVGQGSQCISCGVQEOPTILEVNTIMELYLGAKESKSFYR	
Oy	61 ctgcataataaccactttagtcgtggaggctgtcgatcgaggaaatggat 120	RDMQLTSSPSEAAVPGWFLCTVPEADOPVRLOLPENGWNAPITDVFQCD"	
Db	122 CTGCATAATAACCACCTTCAGTCAGTCAGTCATTAAGGTGA 181		
Oy	121 gagatcagctgtgtcccaatcggtggcgatgtcgatcgaggactcgccat 180		
Db	182 GAGACATGCGGTCCTCCCAATCGGCTGGATGCCAGCCCTGTCCTGG 241		
Oy	181 gtcccggttggaaaggactgtcgatgtcgatgtggggggaggacccact 240		
Db	242 GTCCAGGTGGAAAGTCAGTCATGTCGGTGGCAGGAGCGACTAACACTA 301		
Oy	241 gagccatgtggaaatcggtggctatctgtgtggcaagaatccaaaggat 300		
Db	302 GAGCCAGTGAACATCATGGACTCATCTGGTGTGCCAAGGAGCTCACCT 361		
Oy	301 taccgggggacatgggttccatcgatcgatcgatcgatccgggtgggttc 360		
Db	362 TACCGGGGACATGGCTTACCCCGACGGTTCAGTCGCTTACCCGGCGGTRC 421		
Oy	361 ctgtacacgggtggcttggaaaggatcgatcgatcgatcgatcgatcgat 420		
Db	422 CTGTCACGGTGCCTAACAGCGATCAAGCTTACCCACGTTCCCGAGATGGT 481		
Oy	421 ggctgtggaaatggcccatcaagacttacttccggcggatgtggatgt 468		
Db	482 GGCTCGAATGCCCATCACAGACTCTACTTCCAGCAGSTGTGACTAG 529		
RESULT	7	Query Match	100.0%; Score 468; DB 88; Length 2720;
AF186094	AF186094	Best Local Similarity	100.0%; Pred. No. 6e-110;
DEFINITION	2720 bp mRNA	Matches	468; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
LOCUS	Homo sapiens interleukin-1 receptor antagonist homolog (IL1HY1)	gene	
DEFINITION	mRNA, complete cds.	CDS	
ACCESSION	AF186094	gene	181..970
VERSION	AF186094.1	CDS	/db_xref="taxon:9606"
KEYWORDS	human.	gene	/gene="IL1HY1"
ORGANISM	Homo sapiens	gene	/note="IL-1ra homolog"
RESULT	8	Query Match	100.0%; Score 468; DB 88; Length 468;
AX069335	AX069335	Best Local Similarity	100.0%; Pred. No. 6e-110;
LOCUS	468 bp DNA	Matches	468; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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PATENT	25-JAN-2001	CDS	
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LOCUS	468 bp DNA	Matches	468; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DEFINITION	Sequence 32 from Patent WO0102571.	gene	
PATENT	25-JAN-2001	CDS	

RESULT 12					
AX069304	AX069304	357 bp	DNA	PAT	25-JAN-2001
LOCUS	Sequence 1	from Patent	WO0102571.		
DEFINITION					
ACCESSION	AX069304				
VERSION	AX069304.1				
KEYWORDS					
SOURCE	human.				
ORGANISM	Homo sapiens				
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.					
REFERENCE 1 (bases 1 to 357)					
AUTHORS Ford,J. and Pace,A.					
TITLE A interleukin-1 receptor antagonist and uses thereof					
JOURNAL Patent: WO 0102571-A 1 11-JAN-2001;					
HYSEQ, INC. (US)					
FEATURES location/Qualifiers					
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LOCUS	Sequence 2	from Patent	WO0102571.		
DEFINITION					
ACCESSION	AX069305				
VERSION	AX069305.1				
KEYWORDS					
SOURCE	human.				
ORGANISM	Homo sapiens				
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.					
REFERENCE 1 (bases 1 to 575)					
AUTHORS Ford,J. and Pace,A.					
TITLE A interleukin-1 receptor antagonist and uses thereof					
JOURNAL Patent: WO 0102571-A 7 11-JAN-2001;					
HYSEQ, INC. (US)					
FEATURES location/Qualifiers					
source	1 .. 5751				
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	/db_xref="taxon:9606"				
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AX069310	AX069310	5751 bp	DNA	PAT	25-JAN-2001
LOCUS	Sequence 7	from Patent	WO0102571.		
DEFINITION					
ACCESSION	AX069310				
VERSION	AX069310.1				
KEYWORDS					
SOURCE	human.				
ORGANISM	Homo sapiens				
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.					
REFERENCE 1 (bases 1 to 5751)					
AUTHORS Ford,J. and Pace,A.					
TITLE A interleukin-1 receptor antagonist and uses thereof					
JOURNAL Patent: WO 0102571-A 7 11-JAN-2001;					
HYSEQ, INC. (US)					
FEATURES location/Qualifiers					
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LOCUS	Sequence 2	from Patent	WO0102571.		
DEFINITION					
ACCESSION	AX069305				
VERSION	AX069305.1				
KEYWORDS					
SOURCE	human.				
ORGANISM	Homo sapiens				
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.					
REFERENCE 1 (bases 1 to 5751)					
AUTHORS Ford,J. and Pace,A.					
TITLE A interleukin-1 receptor antagonist and uses thereof					
JOURNAL Patent: WO 0102571-A 2 11-JAN-2001;					
HYSEQ, INC. (US)					
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DEFINITION	Homo sapiens IL1L1 gene for interleukin-1 like protein 1, exons 1-6.	PRI	02-NOV-2000
ACCESSION	AJ271338		
VERSION	AJ271338.1	GI:6729586	
SOURCE	Homo sapiens		
ORGANISM	Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Animalia; Butharia; Primates; Catarrhini; Hominoidea; Homo.		
REFERENCE	1 (bases 1 to 6540)		
AUTHORS	Barton,J. L., Herbst,R., Bosliso,D., Higgins,L. and Nicklin,M.J.		
TITLE	A tissue specific IL-1 receptor antagonist homolog from the IL-1 cluster lacks IL-1 α , IL-1 β and IL-1 β antagonist activities		
JOURNAL	Eur. J. Immunol. 30 (11), 3999-3308 (2000)		
MEDLINE	20545212		
REFERENCE	2 (bases 1 to 6540)		
AUTHORS	Nicklin,M.J.H.		
TITLE	Direct Submission		
JOURNAL	Submitted (17-JAN-2000) Nicklin M.J.H., Division of Molecular and Genetic Medicine, University of Sheffield, Royal Hallamshire Hospital, Sheffield, South Yorkshire, UNITED KINGDOM		
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Thu May 31 10:21:45 2001

us-09-612-921-3.rge

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GenCore version 4.5
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Om nucleic - nucleic search, using sw model

Run on: May 31, 2001, 07:36:51 ; Search time 127.02 Seconds

(without alignments)

2150.918 Million cell updates/sec

Title: US-09-612-921-3
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Gapop 10.0 , Gapext 1.0

Searched: 678276 seqs, 291890651 residues

Total number of hits satisfying chosen parameters: 1356552

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	468	100.0	468	20 X89432 Human interleukin
2	468	100.0	468	21 A51597 Human IL-1 receptor
3	468	100.0	766	21 A09193 Human IL-1 homolog
4	468	100.0	1282	20 Z30050 cDNA encoding a hu
5	468	100.0	1323	21 Z50812 Human TANGO-93 cDNA
6	468	100.0	2490	21 Z50813 Human TANGO-93 cDNA encoding a hu
7	468	100.0	2648	20 Z30051 Murine interleukin
8	351.2	75.0	468	22 Q81700 Murine IL-1 homolog
9	351.2	75.0	1275	21 A09198 Murine TANGO-93 cD
10	351.2	75.0	1360	21 Z50811 Murine IL-1 receptor
11	351.2	75.0	1385	21 A51599

RESULTS

RESULT	ID	Description
X89432	X89432 standard; DNA; 468 BP.	XX
X89432;	AC	XX
28-SB-1999	(first entry)	DT
DE	Human interleukin 1 delta encoding DNA.	XX
XX	Interleukin 1 delta; IL-1 delta; glaucoma; ectodermal dysplasia; insulin-dependent diabetes mellitus; winking skin syndrome; T-cell leukemia; lymphoma; tibial muscular dystrophy; ss.	KK
OS	Homo sapiens.	XX
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PT	1..468	XX
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PT	/product= "IL-1 delta"	XX
PN	W09935268-A1.	XX
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DD	15-JUL-1999.	XX
PP	08-JAN-1999; 99WO-US00514.	XX
PR	01-JUN-1998; 98US-0087393.	XX
PR	09-JAN-1998; 98US-0071074.	XX
PA	(IMMV) IMMUNEX CORP.	XX
PI	Sims JE;	XX

ALIGNMENTS

Rodent interleukin
Mouse interleukin
Human IL-1 homolog
Human IL-1 homolog
cDNA encoding a hu
cDNA encoding a hu
Human IL-1 receptor
DNA encoding a hum
DNA encoding a hum
Murine IL-1 receptor
Human interleukin-
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Leaderless IL-1 re
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iRAP conserved DNA
iCRAP conserved D
Intracellular IL-1
Human IL-1 recepto
Sequence of GT10-I
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Human intracellula

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 Db 181 gtcccggttggaaaggcagtcgtttgtatggggggggaggaggccgtactaacta 240
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 Qy 361 ctgtcacgggtggccgttggccatggccatggccgttgcactcccaacttc 420
 Db 361 ctgtcacgggtggccatggccatggccatggccgttgcactcccaacttc 420
 Qy 421 ggctgaatggcccatccacagacttctactccatggccgttgcacttc 468
 Db 421 ggctgaatggcccatccacagacttctactccatggccgttgcacttc 468

RESULT 3

ID A09193 Human IL-1 homologue, hzilla3 standard; DNA; 766 BP.

XX A09193; DE Human IL-1 homologue, hzilla3 coding sequence.

XX Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory; antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic; KW anti-inflammatory; osteopathic; antipsoriatic; antibacterial; cytostatic; immunosuppressive; antiulcer; antidiabetic; nephrotoxic; vulnerary; 2q14; ss; Homo sapiens.

XX Key Location/Qualifiers

FT CDS /*tag_a

FT WO200020595-A1.

PR 08-OCT-1999; 99WO-US23533.

PR 08-OCT-1998; 98US-0169745.

XX PD 13-APR-2000.

XX PA (ZYMO) ZYMOGENETICS INC.

PI Sheppard PO, West RR, Clegg CH;

XX DR WPI; 2000-303780/26.

XX DR P-PSDB; Y92257.

XX PT Proteins useful for treatment of inflammatory conditions such as rheumatoid arthritis and psoriasis are agonists or antagonists as forms of new interleukin-1 homologue

XX Disclosure; Page 51-52; 64pp; English.

CC This DNA encodes an interleukin-1 (IL-1) homologue, designated zilla3 marker AFA037KFL with a LOD score of 13. It is believed that zilla3 acts through IL-1 receptors. In general, zilla3 proteins having a Lys residue at position 148 will have anti-inflammatory activity (e.g. Y92256), whilst those having Asp

CC (see Y92254) or Glu at this position will have pro-inflammatory action. zilla3 is used to modulate an immune response in an animal (claimed).

CC Antagonists zilla3 forms may be used to treat or prevent chronic inflammatory diseases such as rheumatoid arthritis, osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage after ischemia, to treat septic shock, graft-versus-host disease and leukemia.

CC The antagonists may also alleviate inflammatory bowel disease including Crohn's disease and ulcerative colitis, insulin-dependent diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral ischemia.

CC Agonist forms of zilla3 may promote wound healing by IL-1 effects on growth factor secretion and cell proliferation. They may also treat infections, especially gastrointestinal infections.

XX Sequence 766 BP; 154 A; 214 C; 230 G; 168 T; 0 other;

Query	Match	Score	Length
Qy	Best Local Similarity	100.0%	468
Db	Matches	100.0%	468
Qy	Conservative	0	0
Db	Mismatches	0	0
Qy	Pred. No.	4.1e-127	
Db	Indels	0	0
Qy	Gaps	0	0
Db	Gap	0	0
Qy	Query	100.0%	468
Db	Score	DB 21	
Qy	Length	766	
Db	Best Local Similarity	100.0%	468
Qy	Score	DB 21	
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Qy	Best Local Similarity	100.0%	468
Db	Score	DB 21	
Qy	Length	766	

CC secreted protein that belongs to the cytokine superfamily. It plays a role similar to the secreted Interleukin-1 receptor antagonist (IL-1ra) and its expression is developmentally regulated in the uterus, placenta and skeletal muscles. Human TANGO-93 gene is mapped to chromosome 2, within the IL-1 cluster. TANGO-93 modulates immune mediated inflammation and IL-1 gene expression. TANGO-93 is useful as a modulating agent for regulating cellular processes like asthma, graft vs-host disease, rheumatoid arthritis, psoriasis, inflammatory bowel disease, septic shock, ulcerative colitis, Crohn's disease, chronic myelogenous leukemia, cancer, liver disease, Hodgkin's disease, osteoarthritis, Lyme disease, cachexia, and autoimmune diseases e.g. myasthenia gravis, autoimmune diabetes and systemic lupus erythematosus. Partial TANGO-93 sequences are useful in forensic biology, for diagnostic and prognostic assays, prophylactic and therapeutic treatment and pharmacogenomics. The DNA sequence is useful as hybridisation probe and primers, for isolation of TANGO-93 sequence and for the creation of transgenic animals.

septic shock; cachexia; Crohn's disease; chronic myelogenous leukaemia;
 liver disease; diabetes; osteoarthritis; Hodgkin's disease; Lyme disease;
 autoimmune disease; myasthenia gravis; pharmacogenomic; diagnosis;
 systemic lupus erythematosus; forensic; transgenic animal; ss.
 Homo sapiens.

Key	Location/Qualifiers
CDS	63..530 <i>/*tag= a</i> <i>/product= "Human TANGO-93 protein"</i> <i>/note= "Has 53% homology to human Interleukin-1 receptor</i> <i>antagonist (IL-ira)"</i> 3'UTR <i>531..2490</i> <i>/*tag= b</i> <i>/note= "Additional sequences"</i>
WO200008045-A2.	

PT isolated nucleic acid sequences encoding TANGO-93 polypeptide useful
 PT for treating a variety of cellular processes e.g. asthma, rheumatoid
 PT arthritis, psoriasis and autoimmune diseases

XX Example 2; Fig 5; 113pp; English.

CC The present sequence is the cDNA encoding the human TANGO-93, with
 CC additional 3'UTR sequence. It is a secreted protein that belongs to the
 CC cytokine superfamily. It plays a role similar to secreted Interleukin-1
 CC receptor antagonist (IL-1ra). TANGO-93 modulates immune mediated
 CC inflammation and IL-1 gene or protein expression. TANGO-93 is useful as
 CC a modulating agent for regulating cellular processes like asthma, graft
 CC vs-host disease, rheumatoid arthritis, psoriasis, inflammatory bowel
 CC disease, septic shock, ulcerative colitis, Crohn's disease, chronic
 CC myelogenous leukaemia, cancer, liver disease, Hodgkin's disease,
 CC osteoarthritis, Lyme disease, cachexia, and autoimmune diseases e.g.
 CC myasthenia gravis, autoimmune diabetes and systemic lupus erythematosus.
 CC Partial TANGO-93 sequences are useful in forensic biology, for diagnostic
 CC and prognostic assays, prophylactic and therapeutic treatment and
 CC pharmacogenomics. The DNA sequences are useful as hybridisation probes
 CC and primers, for isolation of TANGO-93 sequence and for the creation of
 CC transgenic animals.

SQ Sequence 2490 BP; 650 A; 571 C; 619 G; 650 T; 0 others;

XX

QY 181 gtcggagggtggaaagcaggctgcgttcatgtgggggtggggcactctaacaacta 240
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 CC antagonists. It is an extension of Z30051.
 Db 243 gtccaggggggaaaggccaggccgtcgatgtggggggcaggccactctaacaacta 302
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 CC capable of binding IL-1 receptors (IL-1Rs). The polynucleotides and
 polypeptides can be used for the prevention or treatment of disorders
 involving sepsis, acute pancreatitis, endotoxic shock, cytokine induced
 CC shock, rheumatoid arthritis, chronic inflammatory arthritis, pancreatic
 CC cell damage from diabetes mellitus type 1, graft versus host disease,
 CC inflammatory bowel disease, inflammation associated with pulmonary
 CC disease, other autoimmune disease or inflammatory disease, an
 CC anti-proliferative agent such as for acute or chronic myelogenous leukemia
 CC or in the prevention of premature labor secondary to intrauterine
 CC infections. They can also exhibit activities such as e.g. nutritional
 CC activity, cytokine and cell proliferation/differentiation activity,
 CC immune stimulating or suppressing activity, hematopoiesis regulating
 CC activity, tissue growth activity, anti-inflammation/inhibitory activity, chemotactic/
 CC chemokinetic activity, hemostatic and thrombolytic activity, receptor/
 CC ligand activity, and anti-inflammatory activity. The products can also
 CC be used for detection, diagnosis and drug screening.

XX Sequence 2648 BP; 744 A; 589 C; 644 G; 671 T; 0 other;

Query	Match	Score	DB	Length
Z30051;	Best Local Similarity	100.0%	20	2648
AC	Matches	468;	Prod. No.	6.5e-12;
DT	Conservative	0;	Mismatches	0;
XX			Indels	0;
DE			Gaps	0;
DE	26-JAN-2000 (first entry)			
DE	CDNA encoding a human interleukin-1 receptor antagonist.			
XX	Human, interleukin-1 receptor; IL-1; antagonist; sepsis;			
KW	acute pancreatitis; endotoxic shock; cytokine induced shock;			
KW	rheumatoid arthritis; chronic inflammatory arthritis;			
KW	pancreatic cell damage; diabetes mellitus type 1;			
KW	graft versus host disease; inflammatory bowel disease;			
KW	inflammation; pulmonary disease; autoimmune disease;			
KW	inflammatory disease; antiproliferative; myelogenous leukemia;			
KW	premature labor; intrauterine infection; nutritional activity;			
KW	hematopoiesis regulating activity; tissue growth activity;			
KW	activitin activity; inhibin activity; chemotactic activity;			
KW	chemokinetic activity; hemostatic activity; thrombolytic activity;			
KW	anti-inflammatory activity; ss.			
OS	Homo sapiens.			
XX	(WO951744-1).			
PD	14-DEC-1999.			
XX	05-APR-1999; 99WO-US04291.			
PR	03-APR-1998; 98US-0055010.			
PR	15-MAY-1998; 98US-0079909.			
PR	20-MAY-1998; 98US-0083364.			
PR	19-JUN-1998; 98US-0099818.			
PR	31-JUL-1998; 98US-0127698.			
PR	13-JAN-1999; 99US-0225951.			
PR	17-FEB-1999; 99US-0251370.			
XX	(HYSE-) HYSEQ INC.			
XX	Drmancic R, Crkvenjakov R, Dickson M, Drmanac S, Labat I;			
PI	Leshkowitz D, Kita D, Ford J, Pace A, Alfenito M;			
XX	MPI; 1999-611042/52.			
XX	New isolated interleukin-1 receptor binding polypeptides, used to treat PT e.g. sepsis, shock, arthritis, pancreatitis, graft-versus host disease, PT inflammatory disease, autoimmune disease or proliferative disease			
PS	Claim 1; Fig 8; 123pp; English.			

Db 363 tacggcgccggacatggggctaccatccacacttccacgttcagttcgatgtgcataccctc 422
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 QY 361 ctgtgcacgtgtggctgaaaggatcaggcttcggatccggatccggatgttccggatgttcc 420
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 Db 423 ctgtgcacgtgtggctgaaaggatcaggcttcggatgttccggatgttccggatgttcc 482
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 QY 421 ggctggaaatgccccatcacagacttctacttccacgttcggatgttccggatgttcc 468
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 Db 483 99ctggaaatgccccatcacagacttctacttccacgttcggatgttccggatgttcc 530

RESULT 7
 Z30051
 ID Z30051 standard; cDNA; 2648 BP.

RESULT 8
 C81700
 ID C81700 standard; cDNA; 468 BP.

RESULT 8
 C81700
 ID C81700;
 AC
 DT 09-MAR-2001 (first entry)

XX DE Murine interleukin-1 homologue 3 (IL-1H3) cDNA.

XX Interleukin-1 homologue 3; IL-1H3; mouse; murine; drug screening;

KW agonist; antagonist; human disease; chronic inflammation;

KW acute inflammation; septicemia; autoimmune disease; psoriasis;

KW inflammatory bowel disease; arthritis; transplant rejection; infection;

CC Agonist forms of zilla3 may promote wound healing by IL-1 effects on growth factor secretion and cell proliferation. They may also treat CC infections, especially gastrointestinal infections.
 CC
 XX Sequence 1275 BP; 325 A; 315 C; 305 G; 330 T; 0 other;
 SQ

Query Match 75.0%; Score 351.2; DB 21; Length 1275;
 Best Local Similarity 84.4%; Pred No. 5.9e-93; Mismatches 73; Indels 0; Gaps 0; PT
 Matches 395; Conservative 0; Mismatches 73; Indels 0; Gaps 0;
 PT

QY 1 atggccctgagtgggcgtgtactcgaaagaacctcgatcgagggtcttataatgtat 60
 104 atggttctcgatgtggcactatgttcgaatgaggattcgcgttgaaggatgttat 163
 Db 61 ctgcataataaccaggctctatcgatcgagggtctatcgaggaaatggaa 120
 154 ctgcacataaccaggactcgatcggtggggactcgatcgaggatggag 223
 QY 121 gagatcaacgtgtggccaaatcgatcggtgggtcatcgaggaaatggaa 180
 224 gagatcatgttgtccaaatcggtggggactcgatcgaggatggatgg 283
 QY 181 gtccagggtggaaatggccatcgatcggtgggtcatcgaggaaatggaa 240
 284 gttcaaggagaaatggccatcgatcggtgggtcatcgaggatggatgg 343
 Db 241 gagccaggaaatcgatcggtttatcggtggccaaatggaaatggaa 300
 361 ctgtgcaggatgtttatcggtggccaaatggaaatggaaatggaa 403
 Db 344 ggccaggatgtttatcggtggccaaatggaaatggaaatggaaatggaa 403
 QY 301 tacggcggacatggggatcacccatcgatcggtgggtcatcgaggatgg 360
 404 tacccggcggatgtggttatcccgatcgatcggtggccatccggatgtt 463
 QY 464 ctctgcaggatgtttatcggtggccaaatggaaatggaaatggaa 523
 Db 421 gggtggaaatggccaaatcgatcggtttatcggtggccaaatggaa 468
 QY 524 gctcggcaccatcgaggaaatggccaaatcgatcggtttatcggtggcc 571
 Db

RESULT 10

Z50811 ID Z50811 standard; cDNA; 1360 BP.
 XX AC Z50811;
 DT 31-MAY-2000 (first entry)
 DE Murine TANGO-93 cDNA.
 XX
 TANGO-93; cytokine; mouse; secreted protein; IL-1 expression; cancer; Interleukin-1 receptor antagonist; IL-1ra; inflammatory; antiasthmatic; immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; asthma; antinflammatory; antibacterial; antiviral; cytosolic; immunomodulator; osteoprotective; dermatological; antidiabetic; psoriasis; ulcerative colitis; graft vs host disease; rheumatoid arthritis; inflammatory bowel disease; septic shock; diabetes; Crohn's disease; chronic myelogenous leukaemia; liver disease; osteoarthritis; Lyme disease; autoimmune disease; cachexia; and autoimmune diseases e.g. myasthenia gravis; autoimmunity; diabetes and systemic lupus erythematosus. Partial TANGO-93 sequences are useful in forensic biology, for diagnostic and prognostic assays, prophylactic and therapeutic treatment and pharmacogenomics. The DNA sequences are useful as hybridization probes and primers for isolation of TANGO-93 sequence and for the creation of transgenic animals.
 CC Sequence 1360 BP; 374 A; 328 C; 322 G; 336 T; 0 other;
 CC SQ

Query Match 75.0%; Score 351.2; DB 21; Length 1360;
 Best Local Similarity 84.4%; Pred No. 6e-93; Mismatches 73; Indels 0; Gaps 0; PT
 Matches 395; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 1 atggccctgagtgggcgtgtactcgaaagaacctcgatcgagggtcttataatgtat 60
 140 atggttctcgatgtggcactatgttcgaatgaggattcgcgttgaaggatgttat 199
 QY 61 ctgcataataaccaggctctatcgatcgagggtctatcgaggaaatggaa 120
 200 ctgcacataaccaggactcgatcggtggggactcgacgcaggaaatggatgg 259
 Db
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 260 gagatcatgttgtccaaatcggtggccactcgatcggtggccatccggc 319
 QY 181 gtccagggtggaaatggccatcgatcggtgggtcatcgaggaaatggaa 240
 320 gttcaaggagaaatggccatcgatcggtgggtcatcgaggaaatggaa 379
 QY 241 gagccaggatgtttatcggtggccaaatggaaatggaaatggaa 300
 Db 380 gaggcaggatcatcgatcgaggactactcggtggccaggaaatggaaatgg 439
 QY 301 tacggcggacatggggatcgatcggtggccaaatcgatcggtggcc 360
 Db 440 tacccggcggatgtgggtttatcccgatcgatcggtggccatccggc 499
 QY 361 ctgtgcaggatgtttatcggtggccatcgatcggtggccatccggc 420
 Db 500 ctctgcaccatcgaggaaatggccatcgatcggtggccatccggc 559
 OS
 FH key Location/Qualifiers
 FH CDS 137..607
 FT /*tag= " Murine TANGO-93 protein "
 FT /product= " Murine TANGO-93 protein "
 FT /note= " Has 52% and 50% homology to murine and human
 Interleukin-1 receptor antagonist (IL-1ra)"

QY 241 gagccgtggacatctgggctcatacttgtgcgaaggaaacttccacctc 300
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 244 gagcagtggacatctgggctcatacttgtgcgaaggaaacttccacctc 303
 QY 301 tacccggggacatgggctcatactcgatcggtcgctgcgtccatccgggttc 360
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 304 tacccggggatattgggtttaccatcagctcgatccgggttc 363
 QY 361 ctgtacacggggctcaagcgatctggctgtcaactcaccacttcccgagatgt 420
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 364 ctctggacttccatcaccggaaatcgactccggctgtcaactcagatccctgaggacccc 423
 QY 421 ggctggaaatggccatcacaagacttctactccggcggcgtgac 465
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
 Db 424 ggctggatgtccatcacaagacttctactttcagcgtgtgac 468

RESULT 14

A09194 ID A09194 standard; DNA; 465 BP.
 XX AC A09194;
 XX DT 10-AUG-2000 (first entry)
 XX DE Human IL-1 homologue, zilla3 degenerate coding sequence.
 XX KW Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory; antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic; antirheumatic; osteopathic; antipsoriatic; antibacterial; cytostatic; immunosuppressive; antiulcer; antidiabetic; nephrotropic; vasotropic; vulnerary; ss.
 XX OS Homo sapiens.
 XX WO200020595-A1.
 XX PD 13-APR-2000.
 XX PF 08-OCT-1999; 99WO-US23533.
 XX PR 08-OCT-1998; 98US-0169745.
 XX PA (ZYMO) ZYMOGENETICS INC.
 XX PT Sheppard PO, West RR, Clegg CH;
 XX DR WPI; 2000-303780/26.
 XX DR -PSDB; Y92257.

RESULT 15

A09195 ID A09195 standard; DNA; 465 BP.
 XX AC A09195;
 XX DT 10-AUG-2000 (first entry)
 XX DE Human IL-1 homologue, zilla3-K148, degenerate coding sequence.
 XX KW Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory; antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic; antirheumatic; osteopathic; antipsoriatic; antibacterial; cytostatic; immunosuppressive; antiulcer; antidiabetic; nephrotropic; vasotropic; vulnerary; ss.
 XX OS Homo sapiens.
 XX WO200020595-A1.
 XX PD 13-APR-2000.
 XX PF 08-OCT-1999; 99WO-US23533.
 XX PR 08-OCT-1998; 98US-0169745.
 XX PA (ZYMO) ZYMOGENETICS INC.
 XX PT Sheppard PO, West RR, Clegg CH;
 XX DR WPI; 2000-303780/26.
 XX DR -PSDB; Y92256.

This DNA encodes an interleukin-1 (IL-1) homologue, designated zilla3. It is believed that zilla3 acts through IL-1 receptors. In general, zilla3 proteins having a Lys residue at position 148 will have anti-inflammatory activity (e.g. Y92256), whilst those having Asp (see Y92254) or Glu at this position will have pro-inflammatory action. Antagonists zilla3 forms may be used to treat or prevent chronic inflammatory diseases such as rheumatoid arthritis, osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage after ischemia, to treat septic shock, graft-versus-host disease and leukemia. The antagonists may also alleviate inflammatory bowel disease including Crohn's disease and ulcerative colitis, insulin-dependent diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral ischemia. Agonist forms of zilla3 may promote wound healing by IL-1 effects on growth factor secretion and cell proliferation. They may also treat infections, especially gastrointestinal infections.

PT Proteins useful for treatment of inflammatory conditions such as
 PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
 PT new interleukin-1 homologue
 XX
 PS Disclosure; Page 57-58; 64pp; English.

XX
 CC This degenerate DNA encodes a variant interleukin-1 (IL-1) homologue
 CC designated zilla3_K148. It is believed that zilla3 acts through IL-1
 receptors. In general, zilla3 proteins having a Lys residue at position
 CC 148 will have anti-inflammatory activity, whilst those having Asp (see
 CC 192254) or Glu at this position will have pro-inflammatory action.
 CC Zilla3 is used to modulate an immune response in an animal (claimed).
 CC Antagonists zilla3 forms may be used to treat or prevent chronic
 CC inflammatory diseases such as rheumatoid arthritis, osteoarthritis and
 CC Lyme arthritis, psoriasis, to reduce tissue damage after ischemia, to
 CC treat septic shock graft-versus-host disease and leukemia.
 CC The antagonists may also alleviate inflammatory bowel disease including
 CC Crohn's disease and ulcerative colitis, insulin-dependent diabetes
 CC mellitus, acute pancreatitis, glomerulonephritis and cerebral ischemia.
 CC Agonist forms of zilla3 may promote wound healing by IL-1 effects on
 CC infections, especially gastrointestinal infections.
 CC
 XX Sequence 465 BP; 71 A; 45 C; 85 G; 67 T; 197 other;

SQ

Query Match	70.1%	Score	328	DB	21	Length	465;
Best Local Similarity	57.4%	Pred.	No.	2.4e-86;		Mismatches	267;
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						Gaps	0;
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QY	121	gaggatcaggcggtggcccaatcggtggctggatgcacgtgtcccggtcatccgtgg					180
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QY	181	gtccaggagggggggggggggggggggggggggggggggggggggggggggggggg					240
Db	181	gtncargnggnwnscartggytnwntqyggngtngncargarcnacnytnacnyt					240
QY	241	gaggccaggaaacatcatggactctatggggccaggaaatccaaaggcttcaccc					300
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Db	301	tayngmngnayatgggytnacnwswsnsttqygarwengcngntayccngnttg					360
QY	361	ctgtgcacatgtggctggaggccatggggccatggggccatggggccatggggccat					420
Db	361	yntqyactgtncengcngcngaycarcongtnqytnacnacrytncngaraygn					420
QY	421	99ctggaaatggcccccattccaggcttctactccaggctgtgac					45
Db	421	99tggaaatggcccccattccaggcttctactccaggctgtgac					45

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 Job time: 2544 sec

Gencore version 4.5
 Copyright (c) 1993 - 2000 Compugen Ltd.
 OM nucleic - nucleic search, using sw model
 Run on : May 31, 2001, 06:35:20 ; search time 1132.2 Seconds
 (without alignments)
 3611.106 Million cell updates/sec
Title: US-09-612-921-3
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Scoring table: IDENTITY.NUC
 Gapop 10.0 , Gapext 1.0
Searched: 9623517 seqs, 4368049070 residues
Total number of hits satisfying chosen parameters: 19247034
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
 Maximum Match 100%
 Listing first 45 summaries
Database :
 EST:
 1: gb_est1: *
 2: gb_est2: *
 3: gb_est3: *
 4: gb_est4: *
 5: gb_est5: *
 6: gb_est6: *
 7: gb_est7: *
 8: gb_est8: *
 9: gb_est9: *
 10: gb_est10: *
 11: gb_est11: *
 12: gb_est12: *
 13: gb_est13: *
 14: gb_est14: *
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 113: em_estp26: *
 114: em_estp27: *
 115: em_estp28: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

% SUMMARIES					
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171:	gb_est94:*				
172:	gb_est95:*				
173:	gb_est96:*				
174:	gb_est97:*				
175:	gb_est98:*				
176:	em_gss_fun:*				
177:	em_gss_hum1:*				
178:	em_gss_hum2:*				
179:	em_gss_hum3:*				
180:	em_gss_hum4:*				
181:	em_gss_hum5:*				
182:	em_gss_hum6:*				
183:	em_gss_hum7:*				
184:	em_gss_hum8:*				
185:	em_gss_hum9:*				
186:	em_gss_invl:*				
187:	em_gss_inv2:*				
188:	em_gss_inv3:*				
189:	em_gss_other:*				
190:	em_gss_p111:*				
191:	em_gss_p1n2:*				
192:	em_gss_pro:*				
193:	em_gss_root1:*				
194:	em_gss_root2:*				
195:	em_gss_root3:*				
196:	em_gss_root4:*				
197:	em_gss_root5:*				
198:	em_gss_vrt1:*				
199:	em_gss_vrt2:*				
200:	em_gss_vrt3:*				
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202:	gb_gss2:*				
203:	gb_gss3:*				
204:	gb_gss4:*				
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231:	gb_gss31:*				
232:	gb_gss32:*				
233:	gb_gss33:*				
234:	gb_gss34:*				

Fax: 217 244 5617
 Email: h-llewin@uiuc.edu
 Funding for cattlne EST sequencing was provided by the USDA National Research Initiative, Animal Genome Resource Grant AG-99-305-8554 to H. A. Lewin and J. E. Womack. Base Calling/Quality Scores: PHRED from Washington University Genome Center. Vector Trimming: Cross_match from Washington University Genome Center PHRAP suite. Sequences submitted are vector free and at least 200 bp in length.
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 BACKWARD: ATTTACCCCTCACTAAG
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 High quality sequence stop: 508.
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 Db 64 ACCATTAGTCGTCGATCTTGCAAGGACCAAACTTAATTAGGGAGAGATGATG 123
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 Db 124 TGGTACCCA-----TCGAAACCCATACTATCTCTCCCTGGATCCAGGG 168
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 Db 349 CTCACGGGCCACACGCCGGGGCTCACCAATATGCC 392

SOURCE	Mus musculus
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
REFERENCE	(bases 1 to 1020)
AUTHORS	NIH-MGC http://mgc.nci.nih.gov/
TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)
COMMENT	Unpublished (1999) Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550 Email: Robert.Strausberg@nih.gov
FEATURES	Procurement: Gilbert Smith, Ph.D. cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at: http://image.llnl.gov plate: LIAM10328 row: n column: 19 High quality sequence start: 4 High quality sequence stop: 653. Location/Qualifiers
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Thu May 31 10:21:47 2001

us-09-612-921-3.rst

Page 11

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Job time: 4892 sec

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